# Music from the Trees

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y father was a carpenter for more than 50 years. He was from the old school where artisanship was valued over profit, and quality valued more than convenience. Through his example, I learned early to appreciate the patience and vision required to turn a block of wood into an item of beauty and function.

Although today's technology makes it possible to manufacture almost anything in a matter of moments, there remains a desire to own a unique piece that suits one's individual needs, tastes and selfimage.

Luthiers, people who make musical instruments, represent the best of those who strive to recall, recreate and relive the artistry of a bygone era. Alabama is home to several of these talented individuals and each of them make good use of local and exotic woods to create lasting treasures.

Henry Taylor, 81, of Cullman County started building guitars about 22 years ago when a friend introduced him to a C.F. Martin guitar kit that had just come on the market. After that he began making the instruments from scratch and has since built about 50 "Taylormade" brand guitars in his Hanceville workshop. He has sold most of them but has given quite a few away as gifts to his seven children and 21 grandchildren.

Charles Grissom uses scrapers and planes rather than sandpaper to smooth the wood. Here he works on wood that he cut and dried.

Halfway between Hamilton and Hackleburg in Marion County, you will find Charles Grissom custom-building guitars and mandolins. Self-taught through reading, observation and mistakes, he has been in the business since the mid-70s. His trademark mother-of-pearl "Grissom" is on the neck of many bluegrass instruments played today.

Anden Houben of Tuscaloosa has been creating historically accurate harpsichords full-time since 1976. He, too, is self-taught and built his first instrument from a kit. Anden makes each part of the instrument by hand with the exception of the felt and strings, remaining faithful to the original materials and construction techniques.

Musicians, whether they play chamber music or bluegrass, want to own a beautiful instrument that also sounds good. One of the most important variables in defining the sound of a musical instrument is the wood used to make it.

## **Species**

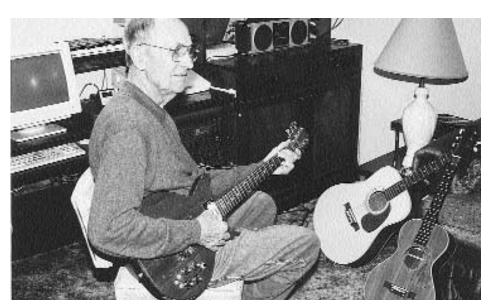
A musical instrument may contain seven or more species of wood, each with an affect on the sound it produces. Even within a species, no pieces of wood are exactly alike. Environmental conditions, genetics, the age of the tree, growth patterns, grain orientation and curing conditions are equally important when wood is selected.

Spruce is the traditional source for the soundboard of all musical instruments. It is light and has a tight grain enabling the wood, when properly cut, to vibrate. As the instrument ages, sap hidden in the grain gradually dries and crystallizes, further accentuating the bright, resonant quality of the wood.

Alabama woods commonly used for guitars and mandolins are hickory, white oak, maple, holly, persimmon, cherry, poplar, black walnut and redcedar.

Anden makes use of cherry, basswood, cottonwood and walnut. Other species such as mahogany and rosewood are also among woods traditionally used in making musical instruments.

Other than species, a significant variable is the quality of the wood, which includes appropriate cutting and careful aging.



Henry Taylor strums an electric guitar he built for his grandson. On the floor are (center) a flattop acoustic guitar and (right) a scaled-down guitar for his youngest granddaughter.

#### Cutting

Wood used for a musical instrument is quartersawn. The log is cut to length and then cut into quarters (called billets), and the boards are sawn off the resulting flat sides. Quartersawing contributes to a high strength-to weight ratio. This wood shrinks and swells less in width, and warps less than plain-sawn wood. Also, quartersawn wood makes the grain more visible.

Quartersawn wood results in a multitude of wedge-shaped pieces. If you were to reassemble the log, you could pick up two adjacent pieces, open them up as though they were a book and create a "book-matched" set of wedges. Bookmatched wood for the top of a guitar provides symmetry and improves tone.

# Drying

Wood used for instruments must be thoroughly dry. Wood moves quite a lot as humidity changes; it shrinks as it dries and swells as it becomes moist. If the instrument is constructed before the wood is completely dry, shrinking and swelling can cause the wood to crack.

Air-dried woods enhance the musical properties of wood and are preferred over kiln-dried by most luthiers. Lumber may be purchased air-dried, or the arti-

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Anden Houben patterned this harpsichord after one of the few surviving instruments. The original is in the Victoria and Albert Museum in England.



This lautenwerck, built by Anden Houben of Northport, is a harpsichord-like instrument which imitates the sound of the lute.



This harpsichord frame is made of walnut. All surviving 17th century harpsichords were made of walnut.

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The mandolin, an 18th century Italian instrument, is carved rather than sawn.

san may age his cut wood indoors in a cool room for 6-8 years before using it. Wood dries most quickly from the ends, which may seal off a portion of wet wood inside the piece. To prevent this, sealing the ends with paint or wax is recommended.

Another method for obtaining aged wood is to reuse wood from a piano, church pew or other large piece.

# Handcrafting

One of the larger U.S. factories claiming "handmade" guitars produces more than 100 guitars a day. Numbers such as these are hard to believe compared to a guitar or mandolin maker creating 8 or more a year, or to Anden who may work on a single harpsichord for up to eight months.

Artisans such as Henry Taylor, Charles Grissom and Anden Houben look at a rough piece of wood and see an elegant harpsichord or a blazing fiddle, and devote their days to releasing the wood's potential.

Performing hundreds of separate tasks including measuring, scraping, bracing, gluing, clamping, doing inlay, etc., is only part of the process that produces a beautiful, good-sounding instrument. The heart that goes into a handcrafted instrument is, perhaps, of even greater value.

#### Resources

www.danabourgeois.com www.hoffmanguitars.com www.woodweb.com